UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

SS&C TECHNOLOGIES HOLDINGS, INC., and ADVENT SOFTWARE, INC.,

Plaintiffs,

v.

D. E. SHAW & CO., L.P.,

Defendant.

Plaintiffs SS&C Technologies Holdings, Inc. ("SS&C Technologies") and Advent Software, Inc. ("Advent," and collectively with SS&C Technologies, "SS&C"), by its attorneys, Shearman & Sterling LLP, for its Complaint against D. E. Shaw & Co., L.P. ("D. E. Shaw"), hereby allege as follows:

NATURE OF THE ACTION

- 1. D. E. Shaw is the architect of a decade-long unlawful scheme to steal and commercialize for itself SS&C's proprietary technology and trade secrets.
- 2. D. E. Shaw is a large asset management firm, and a longtime licensee of SS&C's market-leading Geneva portfolio accounting software. D. E. Shaw's Geneva license restricts its use of the software to D. E. Shaw's internal data processing operations; prohibits development of derivative works; and forbids outside commercialization of the Geneva technology, for example by licensing Geneva technology to third parties.
- 3. In violation of these provisions, D. E. Shaw developed its own software applications and technology based on Geneva. D. E. Shaw did not limit its use of its Geneva-derived technology to its internal data processing operations. Instead, recognizing the value of the technology, D. E. Shaw devised a plan to monetize that value for itself by marketing the

technology to other asset managers. To that end, D. E. Shaw spun off a subsidiary, Arcesium LLC ("Arcesium"), for the express purpose of commercializing the Geneva-derived technology and then licensed that technology to Arcesium. Thereafter, D. E. Shaw assisted Arcesium in selling the Geneva-derived technology in the marketplace at SS&C's expense, and—as Arcesium's majority owner—reaped the financial benefits from Arcesium's success in doing so.

- 4. As part of the scheme, D. E. Shaw caused Arcesium to obtain from SS&C a reseller license that allowed Arcesium to license Geneva to customers and to provide Geneva hosting services to those customers. The reseller license enabled Arcesium to expand the market for the Geneva-derived technology that D. E. Shaw had improperly licensed to Arcesium. It also gave Arcesium extensive, continuing, access to Geneva, which Arcesium used to further develop and enhance the Geneva-derived technology it licensed from D. E. Shaw, as well as to develop new products.
- 5. D. E. Shaw did not tell SS&C that Arcesium's core offering was technology that D. E. Shaw developed based on Geneva and licensed to Arcesium. D. E. Shaw and Arcesium also did not tell SS&C when they decided that Arcesium would develop its own portfolio accounting engine to compete with Geneva, nor that the engine would be integrated with the Geneva-derived applications that Arcesium licensed from D. E. Shaw. For several years, Arcesium feigned fidelity to SS&C by acting as if it was reselling Geneva to customers for their mutual benefit when, in fact, D. E. Shaw and Arcesium had secretly decided that Arcesium would develop its own portfolio accounting offering incorporating Geneva technology that it would use to compete against SS&C, including by converting Geneva customers to Arcesium's offering. D. E. Shaw and Arcesium agreed to keep the portfolio accounting project secret from SS&C.

- 6. By the time the reseller agreement expired in January 2020, Arcesium had what it needed to go to market with a new portfolio accounting engine employing Geneva trade secrets and integrated with the other Geneva-derived technology stolen from SS&C. Today, Arcesium has no rights to Geneva, yet it is out in the marketplace competing against SS&C with technology that is derived from and uses Geneva trade secrets. Geneva represents 25-plus years of innovation by Advent and SS&C that cannot be replicated; indeed, Arcesium has only achieved its current market position in portfolio accounting solutions because Arcesium and D. E. Shaw stole Geneva technology from SS&C.
- 7. While Arcesium is the customer-facing embodiment of the misconduct described herein, the mastermind is D. E. Shaw. It was D. E. Shaw that improperly used Geneva trade secrets to create its own Geneva-derived technology. It was D. E. Shaw that spun off Arcesium for the express purpose of commercializing the infringing technology. It was D. E. Shaw that financed and enabled Arcesium's commercial exploitation of the Geneva-derived technology. And it was D. E. Shaw that benefitted, because D. E. Shaw is both Arcesium's largest customer (and largest user of the infringing technology) and the majority owner of Arcesium. D. E. Shaw should be held accountable. That is why SS&C brings this action against D. E. Shaw for trade secret misappropriation and breach of contract.

PARTIES, JURISDICTION, AND VENUE

8. Plaintiff SS&C Technologies is a corporation organized and existing under the laws of the State of Delaware with its principal place of business at 80 Lamberton Road, Windsor, Connecticut. SS&C Technologies is a global business with offices around the world, including an office in New York, New York. SS&C Technologies provides specialized software and software-enabled services to the financial services industry.

- 9. SS&C Technologies has several subsidiaries and affiliates, including Plaintiff Advent Software, Inc., which SS&C Technologies acquired on July 8, 2015. Advent is a corporation organized and existing under the laws of the State of Delaware with its principal place of business in San Francisco, California.
- 10. Defendant D. E. Shaw is a limited partnership organized and existing under the laws of the State of Delaware with its principal place of business at 1166 Avenue of the Americas, New York, New York.
- 11. Non-party Arcesium, founded in 2014 as a spin-off from D. E. Shaw, is a limited liability company incorporated in the State of Delaware, with its principal place of business at 1166 Avenue of the Americas, New York, New York.
- 12. This Court has subject matter jurisdiction under 18 U.S.C. § 1836(c), 28 U.S.C. § 1331, and 28 U.S.C. § 1367.
- 13. This Court has personal jurisdiction over Defendant D. E. Shaw because D. E. Shaw has its principal place of business in New York, through which it has a systemic and continuous course of doing business in New York, such that D. E. Shaw is subject to general jurisdiction in New York. In addition, critical aspects of this case—including D. E. Shaw's trade secret misappropriation and contract breaches—took place in this District.

FACTS

I. <u>Background Of The Parties And Their Businesses</u>

A. SS&C

14. SS&C is a pioneer in delivering software and software-enabled services to financial institutions to automate their complex business processes. Founded in 1986, SS&C has thousands of customers including banks and commercial lenders, mutual funds, hedge funds,

private equity firms, real estate investment trusts, corporate treasury groups, insurance companies, pension funds, municipal finance groups, and real estate property managers. SS&C built its business through decades of hard work, ingenuity, innovation, and investments of hundreds of millions of dollars to develop its valuable trade secrets and know-how.

B. D. E. Shaw

- 15. D. E. Shaw is a large asset manager that manages a range of investments for its customers. D. E. Shaw touts itself as a pioneer in quantitative analysis and the use of technology to support its investment strategies. Since 2003, D. E. Shaw has licensed SS&C's Geneva portfolio accounting software under a direct license from SS&C.
- D. E. Shaw established Arcesium through a spin-off of its middle- and back-office operations in 2014. Arcesium's CEO and most of its key technology leadership came from D. E. Shaw. D. E. Shaw has provided extensive services and support to Arcesium including in the technology, HR (including managing employee onboarding and payroll), and legal areas. D. E. Shaw provided most of Arcesium's initial capital and has continued to support Arcesium financially. While Arcesium has brought in additional investors, D. E. Shaw continues to own a substantial majority interest in Arcesium. D. E. Shaw has always closely monitored and controlled Arcesium, including through representation on Arcesium's board of directors, and direct involvement in day-to-day business decisions relating to personnel, technology, and otherwise. D. E. Shaw has approved Arcesium's key hires, technology expenditures, and pricing for product offerings, including for the infringing technology products at issue in this lawsuit.

II. SS&C's Geneva Portfolio Accounting Software

A. The Geneva Product

17. One of SS&C's product offerings is a portfolio accounting software product named Geneva. First released in 1995, Geneva is designed to meet the real-time needs of asset

managers, hedge funds, prime brokers, fund administrators, private equity firms, and family offices. SS&C licenses Geneva to customers throughout the United States and around the world. Geneva integrates the investment management process, portfolio management, and related functions. Among its features, Geneva serves as a single source of consolidated data that provides a comprehensive, accurate, and timely view of portfolio data across an entire firm. Geneva provides real time, granular data; eliminates manual data flow; provides a full audit trail; provides consistent, real-time position views; enables daily net asset value calculations; and delivers timely and accurate reporting.

- 18. SS&C distributes Geneva in several ways. Principally, SS&C licenses Geneva directly to customers. Each direct customer has an individual license agreement with SS&C setting forth the terms of the license, which include the scope of permissible use, the duration of the license (including when it expires and may be renewed), and authorized users of the license. D. E. Shaw licenses Geneva directly from SS&C.
- 19. Some direct customers also obtain related services—such as hosting and integration with the customer's other technology systems—from SS&C, while other direct customers obtain such services from third parties, as D. E. Shaw does from Arcesium. If a Geneva customer wants to allow a third party to integrate its technology or services with Geneva, the customer must obtain permission from SS&C for such third-party access pursuant to its Geneva license. Only authorized parties may access and use Geneva, which is the confidential intellectual property of SS&C.
- 20. SS&C has also entered into a limited number of reseller agreements under which it designates certain third parties as authorized Geneva resellers with rights to service certain Geneva customers. Arcesium was a licensed Geneva reseller from 2015 until early 2020.

- 21. Geneva is extremely valuable to SS&C. Geneva was Advent's leading software product when Advent was acquired by SS&C in 2015, and a substantial portion of the \$2.6 billion that SS&C paid for Advent was for Geneva. Both before and after the acquisition, Advent and then SS&C have dedicated extensive personnel and resources to developing and refining Geneva to meet the needs of hedge funds and other customers.
- has been iterative as SS&C has undertaken the painstaking work of determining what features and functionality will best meet client needs, and then executing on those roadmaps, often through laborious and time-consuming trial and error over many years, to come up with solutions that work. This process of innovation also involves feedback from thousands of SS&C's internal Geneva users in SS&C's fund administration business, who use Geneva on a daily basis to provide administration services to hedge funds. This fast and frictionless feedback loop from real world end-users that sit inside SS&C has incalculable value. Geneva thus represents 25-plus years of effort in gathering and analyzing customer requirements to meet the customers' most complex and sophisticated needs, and then translating them into computer software that is functional, dynamic, and efficient. This enormous effort cannot be replicated without the decades of work that SS&C has invested in Geneva.
- 23. Importantly, Geneva's value to SS&C goes well beyond SS&C's investment in its development. For more than 25 years, Geneva has been SS&C's primary entry point with hedge funds and other asset managers, especially those with complex asset classes that require the most sophisticated portfolio accounting solutions. SS&C's engagement with these customers not only yields substantial Geneva license revenue for SS&C but also opens opportunities to provide other services and solutions which, in turn, helps SS&C pursue new avenues of software

development for the benefit of customers. Geneva thus represents for SS&C a key point of customer engagement that facilitates further innovation. By seeking to displace Geneva in the marketplace through theft of SS&C's proprietary and trade secret information instead of fair competition, Arcesium is not only depriving SS&C of an important revenue stream (and unjustly enriching itself in the process) but it is also undermining SS&C's ability to work with customers to achieve further innovation for the benefit of SS&C and its customers alike.

B. The Geneva Trade Secrets

- 24. Over several decades, and with the investment of significant time and hundreds of millions of dollars, SS&C developed Geneva to be a highly competitive portfolio accounting product. SS&C continues to invest from 15 million to more than 20 million dollars annually in Geneva's development. SS&C has regularly maintained and updated Geneva to account for technological advances, new or revised accounting standards, and to provide new features and functionality.
- 25. Over time, SS&C has developed an array of proprietary methodologies to deliver accounting functionality for sophisticated and complex asset classes, including complex accounting calculations, reporting, and portfolio management functions that are part of Geneva. Geneva's unique data and processing model, combined with its powerful standard and custom reporting capabilities, give SS&C's customers the ability to analyze and view data in a variety of useful ways. The methodologies, models, and processes that power Geneva's functionality are highly confidential.
- 26. The Geneva product consists of SS&C's proprietary and non-public intellectual property, including but not limited to: the executable version of the Geneva software; Geneva's data model and database schema; Geneva's integration layer, which includes application

programming interfaces ("APIs"), Geneva's Report Specification Language ("RSL"), Query Language, the Geneva Loader and Geneva loader formats, and Geneva binaries; Geneva's chart of financial accounts; and proprietary accounting functionality that Geneva uses to manage a broad range of complex asset classes (including, for example, bonds, swaps, futures, options, other derivatives, asset backed securities, and credit facilities). In addition, Geneva customer pricing embodies SS&C proprietary, confidential information.

- 27. Geneva's software reflects SS&C's confidential and proprietary trade secrets. The software is made up of object code, which, when executed, performs proprietary portfolio accounting functions. The software stores investment data, portfolio data, price data, transaction data, and other data in a proprietary object-oriented relational database and uses the stored data to derive accounting data using proprietary methodologies. The software then presents that accounting data in the form of Geneva reports. The software includes both graphical user interfaces and command-line interfaces to receive user inputs and provide user outputs to enable user interaction with Geneva. The software also includes an integration layer to receive inputs and commands from, and to provide outputs to, machine-executable processes. Geneva's database structure, proprietary methodologies, reports, interfaces, and integration layer reflect decades and hundreds of millions of dollars-worth of research and development by thousands of SS&C employees. SS&C provides access to the executable version of Geneva only to licensed users who agree to abide by strict confidentiality terms.
- 28. Geneva's database schema and data model are SS&C's confidential and proprietary trade secrets. The database schema and data model include thousands of data fields and classes of data stored in the Geneva databases. Geneva trade secrets include, by way of non-limiting examples, SS&C's design choices as to which classes and data elements should be

collected and stored; naming conventions and what to call the classes and data elements; the organization of the classes and data elements in the database; the characteristics, definitions, and functionality associated with each class or data element; the relationships, groupings, connections, and hierarchies among the classes and data elements; and the identification, definition and format of data elements required for loading data into Geneva.

- 29. Geneva's data model and database schema enable Geneva to perform accounting calculations, manage assets, and report on a wide range of investments in multiple asset classes in an efficient, timely, accurate, and useful manner. Such asset classes include, for example, bonds, swaps, futures, options, other derivatives, asset backed securities, and credit facilities. The manner in which Geneva sets up, tracks, manages, accounts for and reports on diverse investment portfolios throughout the life cycle of each asset class is trade secret.
- 30. Geneva's integration layer reflects SS&C's confidential and proprietary trade secrets. The APIs, which are part of Geneva's integration layer, include functions that are structured, sequenced, and organized in a proprietary manner so as to interface with Geneva. Geneva's RSL database query language and Query Language, which are also part of Geneva's integration layer, are proprietary programming languages that are unique to Geneva and can be used to extract data by identifying specific data fields in Geneva's proprietary data model. The Geneva Loader, which is also part of Geneva's integration layer, is a command line interface for loading data into, editing, and deleting records from the Geneva database. Geneva binaries, which are also part of Geneva's integration layer, are executable code that validate information within Geneva and load data into Geneva, identify and resolve data errors, and manage data outputs. Developers may interact with Geneva's integration layer to run Geneva specific

functions and queries, to extract data from specific data fields in the database, or to input data into specific fields in the Geneva database, and develop interconnections with other systems.

- 31. Provided with Geneva's integration layer are sample packages, sample decompiled source code, and documentation, which provide detailed instructions and examples on using Geneva's integration layer, and which are confidential and proprietary trade secrets. For example, D. E. Shaw and Arcesium had access to RSL files provided to them by SS&C, which include uncompiled code for querying and extracting data from Geneva and using that data to formulate reports. Such reports combine relevant data fields in a specific order, based on business logic that SS&C developed and fine-tuned over many years.
- 32. Geneva's Chart of Accounts constitutes SS&C's confidential and proprietary trade secrets. To support the management, reporting, and accounting of asset classes, Geneva stores derived accounting information in a series of ledgers known as financial accounts. For each journal entry line associated with a transaction, Geneva determines the appropriate financial account to which the journal entry line should be posted. Geneva includes hundreds of "seeded" financial accounts, which are default financial accounts included with Geneva when it is licensed to a customer (as opposed to user-defined financial accounts that are added by the customer after they license Geneva). The list of Geneva's financial accounts is known as its "chart of accounts." Geneva's selection, naming, grouping, defining and organization of the default set of financial accounts in Geneva's chart of accounts are designed to support Geneva's management, reporting, and accounting of investments.
- 33. The functionality that Geneva uses to manage a broad range of complex asset classes reflects SS&C's confidential and proprietary trade secrets. Geneva employs deep business logic to allow customers to trade in the most complex assets and security types, for

example swaps, derivatives, asset backed securities, and credit facilities. Geneva's business logic is designed to complement how actual traders and portfolio managers think about the economic characteristics of these investments, and to facilitate related workflows to transact, record, and value those investments.

III. D. E. Shaw's And Arcesium's Geneva Licenses

- A. D. E. Shaw's Geneva License
- 34. D. E. Shaw has licensed Geneva from SS&C since 2003.
- 35. In September 2003, Advent and D. E. Shaw entered into a Software License and Support Agreement (as amended from time to time, the "SLSA"). Pursuant to the SLSA, Advent granted D. E. Shaw "a nonexclusive, nonsublicensable, nontransferable license" to use Geneva, but solely for D. E. Shaw's "own internal data processing operations." SLSA § 2.1. To ensure that D. E. Shaw's use of Geneva would, in fact, be "solely" for its internal data processing operations and would not be used for prohibited purposes such as developing products to compete with Advent or to provide to third parties, the SLSA contained a list of restrictions on D. E. Shaw's use of Geneva. Specifically, Section 2.3 of the SLSA provided that D. E. Shaw "shall not, and shall not allow any third party to" do any of the following:
 - (a) [D]isassemble, decompile, modify, translate, or otherwise reverse engineer the Software; (b) merge or embed the Software into or with any other computer program, and vice versa; (c) install or use the Software on computer systems, servers, or networks that are not authorized for use, as indicated on an applicable Order Schedule(s); (d) distribute, sell, rent, lease, use as collateral to secure a loan, or otherwise provide or disseminate all or any part of the Software to any other person or entity; (e) grant any rights in the Software in any form to any other party, including possessing of data, providing reports, commercial timesharing, rental, or service bureau use; (f) transfer the Software or any right to use the software to a third party without Advent's prior written consent; (g) remove any product identification, proprietary, copyright or other notices contained in the Software; (h) modify any part of the Software, or create a derivative work of any part of the Software; (i) copy the Software except as authorized herein (j) have any license rights other than those expressly granted in this Agreement; or (k)

permit any third party not specifically authorized hereunder to use or have access to the Software.

- 36. Regarding derivative works, which were prohibited pursuant to SLSA § 2.3(h), the SLSA further provided that it did not convey to D. E. Shaw "any rights of ownership in or to the Software" and "[a]ll right, title, and interest in [Geneva] (including, without limitation, all patent rights, copyrights, trademarks, service marks, related goodwill, and confidential and proprietary information) and all modifications (including ideas and know-how) to and derivative works based upon the Software developed by Advent will remain the property of Advent and its licensors." *Id.* § 5.1.
- 37. The parties agreed to stringent confidentiality provisions that prohibit either party from disclosing "Confidential Information," defined to include, with respect to Advent, "software products, consulting methodologies, user manuals and documentation, training materials (computer-based or otherwise), schema, flow charts, business methods, customer information, prototypes, and evaluation copies of any of the foregoing without any requirement of notification." Nondisclosure Agreement (Mutual) ("NDA") § 2.
- 38. The parties agreed that such information could not be used "for any purpose except to evaluate and engage" in a business relationship and not to disclose it to "third parties or to . . . employees, except to those employees who are required to have the information in order to evaluate or engage in discussions concerning the business relationship." NDA § 3.
- 39. In 2014, D. E. Shaw and Advent entered into an amendment to the SLSA, titled Maintenance Amendment (With Hosting Language) (the "Maintenance Amendment" or "MA"). The Maintenance Amendment addressed, among other things, the terms and conditions for D. E. Shaw to use a third-party service provider (like Arcesium) to provide certain services related to Geneva. While SS&C agreed to allow D. E. Shaw to use a third-party service provider, SS&C

insisted on several important restrictions to ensure that the third-party service provider could only access Geneva to assist D. E. Shaw and would not, for example, use its Geneva access to develop a competing software product.

- 40. In the Maintenance Amendment, the parties agreed that D. E. Shaw would be permitted to use "hosting and/or managed services providers (each, a 'Third Party Service Provider') as third party service providers entitled to install, copy, host, manage, and operate [Geneva] on [D. E. Shaw's] and its Affiliates' behalf, provided that any Third Party Service Provider shall only install, copy, host, manage, and operate [Geneva] for the benefit of [D. E. Shaw] and its Affiliates to the same extent [D. E. Shaw] and its Affiliates could do so on their own behalf . . . consistent with the scope of the license grants and restrictions set forth in the [SLSA]." MA § C, at 1-2.
- 41. The Maintenance Amendment further stated that "any Third Party Service Provider shall not (a) process data or otherwise install, copy, operate, use, or access the Software for any entity or person other than [D. E. Shaw] and/or its Affiliates, or (b) disclose Advent's Confidential Information to any entity or person other than [D. E. Shaw] and/or its Affiliates." MA § C, at 2.
- 42. Importantly, the Maintenance Amendment prohibited D. E. Shaw from using a Third Party Service Provider that licensed a portfolio accounting engine in competition with SS&C. The parties' agreement in this regard could not have been clearer: "In no event may [D. E. Shaw] engage a party as its Third Party Service Provider that licenses to financial firms a portfolio accounting engine that competes with any Advent software product." MA § C, at 2. The purpose of this provision was to avoid a situation in which an Advent competitor could use its

access to Geneva to develop or improve its own portfolio accounting product, or to otherwise compete unfairly with Advent.

43. The Maintenance Amendment also provided that D. E. Shaw "shall remain liable for the acts and omissions of Third Party Service Provider in breach of [D. E. Shaw's] rights and obligations under the [SLSA] as if [D. E. Shaw] had undertaken such acts and committed such omissions directly." MA § C, at 2.

B. Arcesium's Hosted Reseller Agreement With SS&C

- When D. E. Shaw spun off Arcesium in 2014, it understood that Arcesium's value proposition for customers would be enhanced if Arcesium could offer customers a license for Geneva together with Arcesium's technology solutions (which included Geneva-derived technology that Arcesium improperly obtained via a license from D. E. Shaw). Accordingly, D. E. Shaw approached Advent to propose a business partnership. Advent was receptive to D. E. Shaw's proposal and, in 2015, Advent and Arcesium entered a Hosted Reseller Agreement ("HRA"). At no time did D. E. Shaw or Arcesium disclose to Advent (or SS&C) that Arcesium's core technology was derived from and incorporated Geneva trade secrets. Instead, D. E. Shaw and Arcesium explained Arcesium's value proposition to the market as delivering ancillary services to Geneva customers, making the ability to resell Geneva valuable to both Arcesium (and D. E. Shaw, as its parent) and Advent.
- 45. Under the HRA, Arcesium became a licensed reseller of Geneva, whereby Arcesium could offer customers a license to Geneva. The customer would enter a license agreement with Arcesium who, in turn, would pay SS&C an agreed fee for each license. Arcesium offered customers a single, integrated solution where Geneva was deployed alongside, and integrated with, Arcesium's solutions (including cash management, collateral management,

data management, corporate action processing, and reconciliation) to handle all aspects of the customer's post-trade tasks. The fundamental purpose of the HRA was for Arcesium to promote, market, and encourage customers to purchase Geneva for the benefit of both parties.

- Accesium's use of Geneva and prohibiting Arcesium from using Geneva for improper purposes such as to develop its own portfolio accounting capabilities. Thus, the HRA allowed Arcesium to use Geneva "solely to perform for the benefit of Customers under the applicable Customer Agreement," HRA § 3.1; prohibited Arcesium from modifying Geneva or creating derivative works from Geneva, HRA § 5; prohibited Arcesium from using Geneva "for its own (e.g., not its Customers') internal data processing operations," *id.*; and contained extensive confidentiality provisions, HRA § 11.
- 47. The term of the HRA was five years, after which either party had the right to not renew the agreement. When the five-year term came up for renewal, SS&C declined to renew and the HRA expired on January 10, 2020.
- 48. Under Section 10.4 of the HRA, Arcesium had certain run-off rights following expiration of the agreement. In particular, Arcesium was allowed to continue hosting and providing Geneva-related services to customers to which Arcesium had resold a Geneva license during the term of the HRA (but not to so-called "Migrated Customers," defined in Section 2 of the HRA, who were customers like D. E. Shaw that had their own direct Geneva licenses with SS&C). Such run-off rights lasted only for the initial term of the resold customer's Geneva license and for any renewal term to which the parties agreed. Under HRA Section 6.9, SS&C had the right to not renew a resold Geneva license by providing 35 days advance notice of the expiration of the customer's then-current license term.

49. Arcesium's run-off rights were conditioned on Arcesium abiding by specified post-closing obligations under the HRA, including that Arcesium "shall immediately cease promoting, marketing and offering to sell [Geneva] to prospective Customers." HRA § 10.4. Arcesium violated this provision by continuing to promote, market, and offer to sell Geneva after the contract expired on January 10, 2020. Accordingly, on April 13, 2020, SS&C notified Arcesium that it was in breach of its post-termination obligations and that any rights Arcesium had under the HRA to continue to use Geneva had terminated.¹

IV. D. E. Shaw's Theft And Commercialization Of Geneva Trade Secrets

50. D. E. Shaw orchestrated a plan to steal Geneva trade secrets and to commercialize that know-how for itself. First, D. E. Shaw used its access to Geneva under its own Geneva license to develop valuable technology applications that were derived from and used Geneva trade secrets. Second, D. E. Shaw spun off its technology operations into a subsidiary (Arcesium) to which it licensed its Geneva-derived technology. Third, D. E. Shaw assisted Arcesium in enhancing and commercializing both the Geneva-derived technology that D. E. Shaw licensed to Arcesium and new technology that Arcesium (with D. E. Shaw's support and approval) developed using Geneva trade secrets, all the while feigning to promote and sell Geneva when the ultimate plan was to take customers from Advent.

A. D. E. Shaw's Development Of Geneva-Derived Applications

51. Prior to its spin-off of Arcesium in 2014, D. E. Shaw developed a suite of software applications designed to enhance and optimize its use of Geneva (the "Geneva-Derived").

¹ During the course of the HRA, Arcesium resold Geneva licenses to four customers. As the initial terms of those resold customers' Geneva licenses came to an end, SS&C provided the requisite 35 days advance notice that it would not renew those licenses and the resold licenses accordingly terminated between 2020 and 2022. One of the resold customers entered into a new Geneva license directly with SS&C and the other three did not. Accordingly, even if Arcesium had not lost its rights to Geneva by violating its post-termination obligations under the HRA, Arcesium's rights to continue servicing any resold customer with Geneva ended by October 31, 2022 at the latest.

Applications"). For example, the Geneva-Derived Applications performed functions such as organizing large volumes of data to be input into Geneva, writing data to and extracting data from Geneva, and warehousing data extracted from Geneva for use in generating reports. These applications enhanced D. E. Shaw's ability to use Geneva to manage large amounts of data in an efficient and timely manner.

- 52. Not only were the Geneva-Derived Applications tightly integrated with Geneva, but those applications were derived from, and used, Geneva trade secrets. First, the Geneva-Derived Applications used Geneva integration technology such as Geneva loader formats, RSL files, and Geneva binaries, which were essential to allow the Geneva-Derived Applications to load data into and extract data from Geneva. Second, the Geneva-Derived Applications copied significant portions of Geneva's data schema and data model and associated accounting functionality. For example, D. E. Shaw's data warehouse application mirrored many of the fields and attributes in Geneva's data model for complex asset classes such as bonds, swaps, credit facilities, asset backed securities, futures and options, among others.
- 53. D. E. Shaw was prohibited under the terms of its Geneva license from creating any derivative works based on Geneva and D. E. Shaw expressly had no ownership rights in Geneva or any derivative works based on Geneva, which were exclusively owned by SS&C. SLSA §§ 2.3(h), 5.1.

B. D. E. Shaw's Spin Off Of Arcesium To Commercialize The Geneva Trade Secrets

54. D. E. Shaw understood the value of the Geneva-Derived Applications and decided to capitalize on that value by commercializing the technology for itself. D. E. Shaw spun off into Arcesium the technology groups that created the Geneva-Derived Applications. D. E. Shaw then licensed the Geneva-Derived Applications to Arcesium for the purpose of Arcesium exploiting

the technology in the marketplace. D. E. Shaw kept secret from SS&C that it had created applications that were derived from and used Geneva trade secrets and that it had licensed this technology to Arcesium so that Arcesium could use the technology to compete against SS&C.

- C. D. E. Shaw's Participation In Arcesium's Exploitation And Further Theft Of Geneva Trade Secrets
- 55. D. E. Shaw faced a challenge in its plan to commercialize Geneva's trade secrets because the Geneva-Derived Applications were designed to be tightly integrated with Geneva, a third-party technology as to which D. E. Shaw's authorized access had significant limitations. D. E. Shaw was able to realize value from the Geneva-Derived Applications because D. E. Shaw had its own Geneva license from SS&C. But D. E. Shaw's purpose in creating Arcesium was to be able to sell Geneva solutions to a wide segment of third-party asset managers, not only to D. E. Shaw. Accordingly, for the plan to succeed, Arcesium needed the ability to host, manage, operate, and otherwise support other customers' instances of Geneva, and to sell Geneva licenses to prospective customers who did not already have a Geneva license from SS&C. The HRA gave Arcesium what it needed in this regard.
- 56. As noted above, the HRA permitted Arcesium to use Geneva *solely* to service its customers with Geneva licenses via the HRA for the term of the HRA and any run-off period. The HRA prohibited Arcesium from using Geneva for its own internal purposes, for example to build its own portfolio management, reporting, and accounting capabilities that it could offer to any third party let alone in competition with SS&C. But that is exactly what Arcesium did. Indeed, Arcesium and D. E. Shaw knew by 2018 at the latest that SS&C was unlikely to renew the HRA when it was set to expire in January 2020. Rather than build their own technology from scratch, D. E. Shaw and Arcesium leveraged their access to Geneva trade secrets to build a competing offering that Arcesium could continue to exploit after its Geneva rights ended.

- 57. D. E. Shaw's and Arcesium's misappropriation of Geneva trade secrets to develop and enhance Arcesium's portfolio accounting capabilities included the following:
- a. Since 2015, D. E. Shaw has licensed to Arcesium, and Arcesium has continued to use, the Geneva-Derived Applications which, as explained above, are derived from and use Geneva trade secrets. During the term of the HRA, Arcesium used its access to Geneva trade secrets, including for example Geneva's data schema and data model, to further enhance and improve the Geneva-Derived Applications. After the HRA expired on January 10, 2020, D. E. Shaw renewed its license of the Geneva-Derived Applications to Arcesium, and Arcesium continues to use those applications, including in competition against SS&C, as a core part of its customer offering to this day.
- b. Arcesium also used Geneva trade secrets to develop its own portfolio accounting engine, which it began developing in 2019 and brought to market in late 2020. Arcesium's portfolio accounting engine leverages several Geneva trade secrets, including but not limited to Geneva's chart of financial accounts, Geneva's method for coding financial transactions with a multi-segment account key that allows for flexible and granular reporting, and Geneva's tax lot closing methodologies. D. E. Shaw maintained close oversight over Arcesium's development of its new accounting engine, including detailed review of budgets and regular updates and reports.
- c. Arcesium also used Geneva trade secrets to develop an interface application between the Arcesium platform and Geneva (the "Interface Application"). Arcesium developed the Interface Application because once the HRA and its limited run-off rights expired, Arcesium was no longer authorized to access and support most of its customers' instances of Geneva. In order to maintain a significant segment of its business—which was and is supporting

Geneva—Arcesium needed a means to surreptitiously access and operate its customers' instances of Geneva while maintaining the fiction that it no longer had such access. The Interface Application allows Arcesium that secret access. In doing so, the Interface Application incorporates and uses Geneva integration technology, including Geneva loader formats, RSL files, and Geneva binaries. D. E. Shaw participated in, approved, and benefitted from Arcesium's development of the Interface Application, in part because D. E. Shaw is one of the Arcesium customers that uses the Interface Application. In other words, Arcesium uses the Interface Application, portions of which reside on D. E. Shaw-owned computing space, to remotely operate D. E. Shaw's instance of Geneva.

- d. During the term of the HRA and afterward, Arcesium also improperly used its access to Geneva trade secrets to improve other aspects of its platform, including to test the platform and to identify and address any gaps in the platform and its capabilities. For example, in 2019 and 2020, knowing that it would soon lose access to Geneva when the HRA and any run-off rights expired, Arcesium used Geneva to identify and patch gaps in parts of its platform that it used for customer implementations, the servicing of certain asset classes, and the reporting it offered through its platform.
- 58. D. E. Shaw and Arcesium kept secret from SS&C that they were developing a portfolio accounting offering that Arcesium planned to use to compete against SS&C once the HRA expired. This included, for example, a secret plan by which Arcesium would use its status as a Geneva reseller to lure in new customers with Geneva and then switch them to Arcesium's portfolio accounting engine when it was ready. Even when Arcesium notified SS&C of its intent to resell Geneva to particular customer prospects, as required by the HRA, Arcesium covered up that its internal plan was to attract the customer using Geneva, but then to swap out Geneva for

Arcesium's new portfolio engine as soon as the engine was ready. D. E. Shaw was aware of this internal plan as D. E. Shaw approved Arcesium's customer pricing proposals, including proposals to lure in customers with Geneva and then to substitute the Arcesium portfolio accounting solution for Geneva as soon as possible.

59. D. E. Shaw's responsibility for Arcesium's conduct is all the more appropriate because D. E. Shaw controlled Arcesium from its inception. Arcesium's key leadership, including its CEO and technology leadership, came from D. E. Shaw. Arcesium was and is located in the same building as D. E. Shaw. D. E. Shaw provided Arcesium with most of its initial capital and has provided a wide array of services to Arcesium, including in the HR, technology, administration and legal areas. D. E. Shaw has provided financial support for Arcesium, including to backstop Arcesium when it was struggling financially. D. E. Shaw monitored and approved key aspects of Arcesium's day-to-day business including hiring and firing of key employees, technology roadmaps and developments, and product pricing.

V. <u>D. E. Shaw's Material Breach Of Its Geneva License</u>

- 60. In addition to constituting trade secret misappropriation under federal and state law, D. E. Shaw's conduct as described herein constitutes a material breach of its Geneva license with SS&C. The bases of that breach are described below.
 - A. D. E. Shaw Breached The Maintenance Amendment By Using Arcesium As A Third Party Service Provider At The Same Time That Arcesium Licensed A Portfolio Accounting Engine In Competition With Geneva
- 61. While the Maintenance Amendment permitted D. E. Shaw to use Third Party Service Providers for the hosting, management and/or operation of D. E. Shaw's instance of Geneva, the agreement clearly stated that: "In no event may [D. E. Shaw] engage a party as its Third Party Service Provider that licenses to financial firms a portfolio accounting engine that

competes with any Advent software product." This was a material provision of the contract because it was critical to SS&C that D. E. Shaw be prohibited from giving Geneva access to a technology company that might use knowledge of Geneva to develop or enhance its own competing portfolio accounting engine.

- 62. Beginning in or about 2015, Arcesium hosted, managed, and operated D. E. Shaw's instance of Geneva. As such, Arcesium was a Third Party Service Provider within the meaning of the Maintenance Agreement.
- Arcesium the hosting of its instance of Geneva. However, Arcesium continues to this day to operate and manage D. E. Shaw's Geneva. In particular, Arcesium (with D. E. Shaw's oversight and approval) developed the Interface Application, which serves as a technical operating interface between the Arcesium platform and a customer's (including D. E. Shaw's) instance of Geneva. The Interface Application allows Arcesium to operate and manage Geneva remotely, including when a customer (like D. E. Shaw here) hosts its own instance of Geneva. Among other things, the Interface Application: issues commands and related communications to Geneva; uses proprietary Geneva technology including Geneva loader formats, RSL files, and Geneva binaries to load data into and extract data from Geneva; schedules data transfers; interacts with Geneva to manage recovery from any data corruption; and looks up and retrieves information from Geneva. Arcesium's use of the Interface Application with D. E. Shaw allows Arcesium to operate and manage D. E. Shaw's instance of Geneva such that Arcesium continues to be a Third Party Service Provider to D. E. Shaw within the meaning of the Maintenance Amendment.
- 64. Beginning no later than the second half of 2020, Arcesium began licensing its own competing portfolio accounting engine to customers. Accordingly, D. E. Shaw has been in

material breach of the Maintenance Amendment since at least the second half of 2020 because D.

E. Shaw has employed Arcesium as a Third Party Service Provider at the same time that

Arcesium has been licensing a portfolio accounting engine that competes with Geneva.

- B. D. E. Shaw Is Responsible For Arcesium's Conduct In Breach Of The D. E. Shaw Geneva License
- 65. The Maintenance Amendment provides that D. E. Shaw "shall remain liable for the acts and omissions of Third Party Service Provider in breach of [D. E. Shaw's] rights and obligations under the [SLSA] as if [D. E. Shaw] had undertaken such acts and committed such omissions directly." MA § C, at 2. In other words, D. E. Shaw is liable for Arcesium's conduct with respect to Geneva as if D. E. Shaw had committed those acts itself.
- 66. As described in Section IV, above, Arcesium used Geneva trade secrets that it obtained from D. E. Shaw, and to which it had access during the five-year term of the HRA, to develop its own portfolio accounting capabilities, which it has used in competition with SS&C. This is a prohibited use of Geneva under the terms of D. E. Shaw's Geneva license. D. E. Shaw is, accordingly, in breach of its Geneva license because under the Maintenance Agreement, it is responsible for Arcesium's conduct.
- 67. The Maintenance Amendment provides that SS&C's breach of contract remedy may be pursued exclusively against a Third Party Service Provider (and not D. E. Shaw) if certain conditions are met, including that SS&C "has a contractual arrangement with the Third Party Service Provider for the installation, hosting, management, or operation of [Geneva]." SS&C's contractual arrangement with Arcesium terminated in January 2020 and SS&C therefore

no longer has such contractual privity with Arcesium. Accordingly, SS&C may pursue breach of contract remedies against D. E. Shaw for Arcesium's conduct.²

- C. D. E. Shaw Itself Breached Its Geneva License By Misappropriating Geneva Trade Secrets
- 68. As described in Section IV, above, D. E. Shaw has orchestrated a plan to steal and commercialize the Geneva trade secrets. Among other things, this has included: (i) developing the Geneva-Derived Applications which are based upon and use Geneva trade secrets, including Geneva integration technology (Geneva loader formats, RSLs, Geneva binaries) and the Geneva database schema and data model; (ii) licensing the Geneva-Derived Applications to its Arcesium subsidiary, which it spun off for the purpose of commercializing that technology; and (iii) assisting Arcesium in using the Geneva trade secrets to develop Arcesium's own offering in competition with SS&C. The foregoing uses are in material breach of D. E. Shaw's Geneva license, which restricts D. E. Shaw's use of Geneva to its own internal data processing operations and does not permit D. E. Shaw to license Geneva intellectual property to a third party for the purposes of competing against SS&C.

FIRST CLAIM FOR RELIEF

(Violation of the Defend Trade Secrets Act, 18 U.S.C. § 1836)

- 69. SS&C repeats and realleges each allegation set forth above as if fully set forth herein.
- 70. SS&C is the rightful legal owner of the Geneva trade secrets, which constitute protectable trade secrets, including under 18 U.S.C. § 1836.

² The relevant clause of the Maintenance Amendment says that even where SS&C has a current contractual arrangement with the Third Party Service Provider, D. E. Shaw is still contractually responsible for the Third Party Service Provider's conduct if D. E. Shaw "directed or authorized" the conduct. As discussed herein, D. E. Shaw acted in concert with Arcesium—including licensing to Arcesium some of the infringing technology—such that D. E. Shaw did direct and/or authorize Arcesium's conduct.

- 71. D. E. Shaw misappropriated the Geneva trade secrets, which relate to products used in, and intended for use in, interstate and foreign commerce. D. E. Shaw acquired the Geneva trade secrets improperly. D. E. Shaw also used and disclosed the Geneva trade secrets, without SS&C's consent, while under a duty to maintain the secrecy of the trade secrets and limit the use of the trade secrets.
- 72. The Geneva trade secrets contain, without limitation, SS&C's financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes.
- 73. SS&C took reasonable measures to keep the Geneva trade secrets confidential and secret, including by instituting applicable information security policies and trainings, causing employees and Geneva licensees to sign non-disclosure and confidentiality agreements, designating documents "Confidential," and including in contracts with third-party licensees and customers with access to Geneva clauses providing that SS&C's intellectual property belonged to SS&C and could not be used for purposes other than those specifically set forth in the parties' relevant agreements.
- 74. The Geneva trade secrets derive independent economic value, actual and potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of such information.
- 75. D. E. Shaw derived substantial value from the information contained in the Geneva trade secrets. Among other things, D. E. Shaw and Arcesium knowingly used the Geneva trade secrets to build and develop their own products.

76. As a direct and proximate cause of D. E. Shaw's trade secret misappropriation, SS&C has suffered damages in an amount to be determined at trial.

SECOND CLAIM FOR RELIEF

(Common Law Misappropriation of Trade Secrets)

- 77. SS&C repeats and realleges each allegation set forth above as if fully set forth herein.
- 78. The Geneva trade secrets consist of confidential, proprietary, and trade secret information that is not public, not readily created or discoverable by others, and which is the product of extensive investment by SS&C, both in terms of time and money. SS&C has undertaken extensive efforts to maintain the confidentiality of its trade secret intellectual property (including the Geneva trade secrets), which are not in the public domain. If made available to others, the Geneva trade secrets would enable them to compete with SS&C to SS&C's detriment.
- 79. D. E. Shaw acquired the Geneva trade secrets through improper means, including through theft and in breach of D. E. Shaw's duty to maintain the secrecy of SS&C's trade secrets. D. E. Shaw also used the Geneva trade secrets, without SS&C's consent, while under a duty to maintain the secrecy of the trade secrets and limit the use of the trade secrets.
- 80. D. E. Shaw derived substantial value from the information contained in the Geneva trade secrets. Among other things, D. E. Shaw used the Geneva trade secrets to build, develop, and test its own products, which it licensed to Arcesium, and enabled Arcesium to in turn build, develop, and test products, including Arcesium's market offering.
- 81. The means used by D. E. Shaw in effectuating this misappropriation were intentional, willful, malicious, unlawful, unfair, and otherwise improper.

82. As a direct and proximate cause of D. E. Shaw's trade secret misappropriation, SS&C has suffered damages in an amount to be determined at trial.

THIRD CLAIM FOR RELIEF

(Breach of Contract – Use of Arcesium as Third Party Service Provider)

- 83. SS&C repeats and realleges each allegation set forth above as if fully set forth herein.
- 84. The SLSA (including the Maintenance Amendment) is a legal, valid, and enforceable contract with clear and definite terms. The SLSA is supported by consideration and SS&C has performed its obligations under the SLSA.
- 85. D. E. Shaw has materially breached the SLSA by engaging Arcesium as its Third Party Service Provider, which violates Section C of the Maintenance Amendment.
- 86. Section C of the Maintenance Amendment prohibits D. E. Shaw from engaging a Third Party Service Provider "that licenses to financial firms a portfolio accounting engine that competes with any Advent software product."
- 87. During the period that Arcesium has served as Third Party Servicer Provider to D. E. Shaw, it also has licensed a portfolio accounting engine that competes with Advent's Geneva.
- 88. As a direct and proximate result of D. E. Shaw's breach of the SLSA, SS&C has suffered damages in an amount to be determined at trial.

FOURTH CLAIM FOR RELIEF

(Breach of Contract – Liability for Arcesium's Conduct)

89. SS&C repeats and realleges each allegation set forth above as if fully set forth herein.

- 90. The SLSA (including the Maintenance Amendment) is a legal, valid, and enforceable contract with clear and definite terms. The SLSA is supported by consideration and SS&C has performed its obligations under the SLSA.
- 91. The Maintenance Amendment provides that D. E. Shaw "shall remain liable for the acts and omissions of Third Party Service Provider in breach of [D. E. Shaw's] rights and obligations under the [SLSA] as if [D. E. Shaw] had undertaken such acts and committed such omissions directly."
- 92. Arcesium's acts and omissions breached the SLSA by violating the scope of the license granted to D. E. Shaw as described in Section 2 of the SLSA and in Section C of the Maintenance Amendment. Arcesium's acts and omissions also breached Section 5.1 of the SLSA, which provides that licensee has no ownership rights in Geneva or derivative works based on Geneva, which remain exclusively owned by SS&C. Arcesium's acts and omissions also breached Sections 5.1 and 6.1 of the SLSA by improperly disclosing SS&C's confidential information and developing a competing software product using its access to Geneva.
- 93. As a direct and proximate result of these breaches—for which D. E. Shaw is liable under the Maintenance Amendment—SS&C has suffered damages in an amount to be determined at trial.

FIFTH CLAIM FOR RELIEF

(Breach of Contract – Misappropriation)

94. SS&C repeats and realleges each allegation set forth above as if fully set forth herein.

- 95. The SLSA (including the Maintenance Amendment) is a legal, valid, and enforceable contract with clear and definite terms. The SLSA is supported by consideration and SS&C has performed its obligations under the SLSA.
- 96. D. E. Shaw breached the SLSA by improperly developing the Geneva-Derived Applications, licensing those Geneva-Derived Applications to Arcesium, assisting Arcesium in enhancing and commercializing SS&C's trade secrets, and renewing Arcesium's license for the Geneva-Derived Applications after the HRA expired.
- 97. As a direct and proximate result of these breaches, SS&C has suffered damages in an amount to be determined at trial.

SIXTH CLAIM FOR RELIEF

(Declaratory Judgment)

- 98. SS&C repeats and realleges each allegation set forth above as if fully set forth herein.
- 99. The SLSA (including the Maintenance Amendment) is a legal, valid, and enforceable contract with clear and definite terms. The SLSA is supported by consideration and SS&C has performed its obligations under the SLSA.
- 100. D. E. Shaw breached the SLSA by, among other things: (i) employing Arcesium as a Third Party Service Provider while Arcesium was licensing a portfolio accounting engine in competition with Advent; (ii) being responsible and accountable for the misconduct of Arcesium, its Third Party Service Provider, and (iii) itself misappropriating Geneva trade secrets to develop its own software and license that infringing software to Arcesium.
- 101. SS&C is entitled to a declaratory judgment that D. E. Shaw's conduct violates the SLSA.

PRAYER FOR RELIEF

WHEREFORE, SS&C respectfully prays for a judgment against D. E. Shaw on all claims, and requests a judgment providing the following relief:

- (a) General and compensatory damages in an amount to be determined at trial;
- (b) Actual damages, damages for unjust enrichment (including, but not limited to avoided costs), and damages measured as a reasonable royalty, as authorized by 18 U.S.C. § 1836(b)(3)(B) and New York law;
- (c) Exemplary damages for D. E. Shaw's willful and malicious misappropriation of SS&C's trade secrets, as authorized by 18 U.S.C. § 1836(b)(3)(C);
- (d) Punitive damages against D. E. Shaw under each of the asserted causes of action for their intentional bad acts;
 - (e) Necessary and appropriate equitable and injunctive relief, including:
 - i. An order, as authorized by 18 U.S.C. § 1836(3)(A) permanently enjoining and restraining D. E. Shaw, and all those acting in concert with D. E. Shaw, from misappropriating, converting, possessing, accessing, sharing, using or in any way disseminating SS&C's confidential information, including any work product or computer code copied, derived or recreated from SS&C's confidential information; and
 - ii. An order requiring D. E. Shaw to cease using Geneva and to return to SS&C all copies of the Geneva software (including copies in storage media) and documentation, and to provide SS&C with written confirmation thereof, as provided in SLSA § 10.3

- (f) SS&C's costs and disbursements in this action, including reasonable attorneys' fees (see 18 U.S.C. § 1836(b)(3)(D));
 - (g) Pre-judgment and post-judgment interest; and
 - (h) Such other and further relief as this Court deems just and proper.

JURY DEMAND

102. Pursuant to Rule 38 of the Federal Rules of Civil Procedure, SS&C demands a jury trial on all issues so triable.

Dated: New York, New York October 18, 2023 Respectfully submitted,

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